



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION IX**  
**75 Hawthorne Street**  
**San Francisco, CA 94105-3901**

December 3, 2010

Donald W. Kimball  
Executive Vice President & Chief Executive Officer  
Arizona Electric Power Cooperative, Inc.  
1000 South Highway 80  
Benson, Arizona 85602

RE: Information Request Pursuant to Section 114 of the Clean Air Act

Dear Mr. Kimball:

The United States Environmental Protection Agency, Region 9 ("EPA") hereby requires Arizona Electric Power Cooperative, Inc. ("AEPSCO") to provide certain information as part of an EPA investigation to determine the Clean Air Act ("CAA" or the "Act") compliance status of the power plant known as the Apache Generating Station, located at 3525 N. Highway 191 in Cochise, Arizona.

Pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a), the Administrator of EPA is authorized to require any person who owns and/or operates an emission source to establish and maintain records, make reports and provide such other information as he or she may reasonably require for the purposes of determining whether such person is in violation of any provision of the Act. In order for EPA to determine whether a violation has occurred, you are hereby required, pursuant to Section 114(a) of the CAA and this information request, to provide responses to the following requests for information regarding the Apache Generating Station. Please see Enclosure 1 for instructions and definitions.

1. For each EGU at the Apache Generating Station:
  - a. Provide a list of all owners and operators, including all current and previous owners and operators since commencement of operation to the present.
  - b. Specify the time periods during which each entity identified in response to Request 1.a owned or operated the EGU and the percentage ownership for each.
  - c. Describe any and all partnership agreements among the entities identified in response to Request 1.a concerning Apache Generating Station. Also describe the decision-making mechanisms in these agreements with regard to capital projects at Apache Generating Station and provide a copy of each such agreement.
2. For each EGU at Apache Generating Station, provide a list of all capital projects of greater than \$100,000 for which physical construction commenced between January 1, 1990 and

the present. For each capital project, provide the following:

- a. the work order number,
- b. a detailed description of the capital project,
- c. the authorized expenditure,
- d. the actual expenditure,
- e. the date of capital project approval,
- f. the date construction of the capital project commenced,
- g. the capital project completion date,
- h. the date the EGU returned to commercial operation, and
- i. copies of all analyses conducted by AEPCO or any regulatory agency regarding the applicability of Prevention of Significant Deterioration permitting requirements to the capital project.

3. For each EGU at the Apache Generating Station, provide a copy of all capital appropriation requests for capital projects that were approved or completed between January 1, 1990, and September 30, 2010, and which both relate to the replacement or modification (or partial replacement or modification) of steam tubes (including steam drums and water or "mud" drums), water walls, burners, economizers, superheaters, reheaters, air heaters, pulverizers, forced-draft fans, induced-draft fans, and steam turbines, and with actual or authorized total expenditures greater than \$100,000. For each project, identify the date that EGU returned to commercial operation following completion of the capital project or document that the project was never undertaken.

4. For each capital appropriation request identified in response to Request Number 3, provide:

- a. a copy of the request with the authorized expenditure, authorizing signatures and approval dates;
- b. the total project cost, including any cost incurred by AEPCO and all other costs shared by other owners and operators of the EGU;

- c. the project completion date;
  - d. the date the EGU returned to commercial operation following completion of the capital project, or documents that demonstrate the project was never undertaken;
  - e. equipment specifications for all components of the capital project;
  - f. all cost/benefit analyses;
  - g. all alternative options analyses;
  - h. all requests for proposals;
  - i. all proposals and price quotations submitted by equipment suppliers or contractors;
  - j. a copy of all correspondence between AEPCO and any contractor describing any changes in material type or design from the existing component(s) being replaced;
  - k. a copy of any emissions calculations performed before and after the capital project was completed;
  - l. copies of any engineering analyses, performance tests, emissions measurements, or other related documents showing original as-built performance, and performance for the period immediately prior to and immediately following completion of the capital project;
  - m. any evaluations and associated documentation conducted to verify pre- and post-completion performance of the capital project under any equipment vendor guarantee;
  - n. all work order and work request project completion reports;
  - o. all purchase orders and contracts entered into; and
  - p. an explanation as to whether and how the capital improvement was associated with a life extension project, capacity increase, efficiency enhancement or reliability improvement.
5. Provide a copy of all engineering analyses, correspondence, memoranda, telephone discussion summaries and any other communication, including but not limited to Board of

Directors reports, meeting minutes, annual reports, and reports and/or applications to utility regulatory agencies, such as the Arizona Corporation Commission, that describe the benefits, provides justification for, or otherwise explains the nature, extent, cost and frequency of each capital project identified in response to Request Number 3. This request includes all communications both before and after the capital project was undertaken.

6. For each of the capital projects identified in response to Request Number 3, provide the Federal Energy Regulatory Commission ("FERC") Property Record Accounts 311, 312, 314 and 316. If your accounting practices differ from those outlined by FERC, provide information analogous to the FERC property records identified above along with any supporting information.

7. Provide the design specifications, as of commencement of operation, for each EGU at the Apache Generating Station as follows. Include all documentation and correspondence, including but not limited to engineering calculations and contract specifications used in setting the design values.

- a. Steam flow rate, steam temperature and pressure,
- b. Maximum hourly heat input capacity and an explanation of the assumptions made to determine this maximum heat capacity, which shall include, but not be limited to, the coal heat content (in Btu/lb) and the maximum hourly coal feed rate (in lbs/hr),
- c. Maximum hourly coal feed rate (in lbs/hr),
- d. Gross hourly capacity (in Mw),
- e. Net hourly capacity (in Mw),
- f. Net heat rate (in Btu/Kw-hr), and
- g. Design emission rates (in lbs/mmBtu and lbs/hr) for NO<sub>x</sub>, SO<sub>2</sub>, CO, PM, and PM<sub>10</sub>.

8. Provide the information identified in items a. through g. of Request Number 7 at peak and sustained steady-state operation for the one year period preceding and following all capital projects identified in response to Request Number 3 which were constructed at the Apache Generating Station. The information supplied should include, but not be limited to, actual measurement data and any tests conducted to establish pre- and post-project EGU performance.

9. From January 1, 1987, to the present, provide the following for each EGU at the Apache

Generating Station for each calendar year. To the extent possible, please provide this information in computer readable format such as an Excel spreadsheet or other accessible format.

- a. the capacity factor on a monthly and annual basis,
- b. the equivalent availability factor on a monthly and annual basis,
- c. the operating hours on a monthly and annual basis,
- d. the coal consumption on a monthly and annual basis,
- e. all sources of coal burned at the Apache Generating Station and the years each source provided coal,
- f. the maximum hourly average and daily average coal feed rate (in lbs/hr) for each month,
- g. the fuel quality (e.g., % sulfur, % ash, heat content, etc...) on a monthly and annual basis,
- h. the total gross and net generation (in Mw-hr) on a monthly and annual basis,
- i. the heat input rate (in MMBtu/hr) on a monthly average and annual average basis,
- j. the maximum hourly average and daily average heat input rate (in MMBtu/hr) for each month,
- k. the heat rate (in Btu/Kw-hr) on a monthly average and annual average basis,
- l. the emissions (in tons/year) of NO<sub>x</sub>, SO<sub>2</sub>, CO, PM, and PM<sub>10</sub>; provide copies of all source test results, fuel monitoring data, emissions monitoring data, and other information necessary to substantiate the reported emissions. For PM and PM<sub>10</sub>, include separately all test data concerning the "back half" or condensable fraction if such data is available.
- m. identify the top ten annual causes of forced outages and deratings by Mw-hr of lost generation,
- n. lost generation during planned outages,
- o. Generating Availability Data System ("GADS") reports in both hardcopy and

electronic format (e.g. GADS-compatible ASCII format). This information should include for each outage at each EGU:

- i. the lost generation (in Mw-hr) as a result of forced, maintenance, or scheduled outages,
  - ii. the duration (in hrs) of all outages, deratings, and curtailments,
  - iii. the start date and time of outage,
  - iv. the end date and time of outage,
  - v. the North American Electric Reliability Corporation ("NERC") cause code,
  - vi. the event type,
  - vii. the event number,
  - viii. for the year prior to the outage or derate, the net dependable capacity at the time of the outage or derate, and
  - ix. the forced, maintenance or scheduled outages, deratings and curtailments, caused by:
    - (1) boiler related components,
    - (2) turbine generator components,
    - (3) pollution control performance,
    - (4) balance of Station, and
    - (5) miscellaneous
  - p. the scheduled or planned EGU unit retirement dates,
  - q. all historical capability test results of each unit (in Mw), and
  - r. the maximum hourly and daily average gross generation (in Mw) for each month.
10. For each outage identified and included in the annual GADS "top 10" report for each

EGU at the Apache Generating Station since January 1, 1987, to the present, provide:

- a. a copy of the outage report, including the start and end dates and times, the nature or cause of the outage, and
- b. any remedies taken to restore permanently lost, temporarily derated or curtailed capacity.

11. For each performance test conducted for the purpose of determining the operational rating of each EGU at the Apache Generating Station since January 1, 1987, to the present, provide:

- a. the day and hour of the capacity test with any relevant testing protocol specified by the power pool operator,
- b. the standard operating procedure, or equivalent document, for the performance of the capacity tests; this includes the procedures, specifications, conditions, and other parameters under which the representativeness and accuracy of the tests are determined,
- c. all results of capacity tests, including the condition (e.g. valve wide open), steam flow and coal used,
- d. the information requested in items a. through c. of Request Number 11 for any other capacity tests not otherwise provided above, irrespective of whether required by rule or conducted for any other purpose including short tests, and
- e. a description of any equipment limitations or other limiting factors that restricted capacity.

12. For all add-on SO<sub>2</sub> control technology utilized at the Apache Generating Station since January 1, 1987, to the present, and separately for each EGU to the extent such information is available, provide the following information:

- a. a summary of monthly SO<sub>2</sub> removal efficiencies since commencement of operation of the associated EGU to the present, and
- b. the maximum peak and sustained scrubber efficiency on a daily average and monthly average basis for each unit.

13. Provide copies of all permits issued by any regulatory agency since 1990 for the discharge of pollutants to the atmosphere from each EGU at the Apache Generating Station. Also provide

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copies of any engineering analyses or technical support documents that accompanied such permits.

14. If AEPCO seeks to withhold any documents based on a claim of attorney-client communications privilege or the attorney work product doctrine in its response to this information request, provide a privilege log for each document containing the following information: (I) the date, author(s), every individual to whom the document was originally sent, every individual who subsequently acquired the document, the purpose for which the document was sent to or obtained by those individuals, and the employment titles of the authors and recipients; (ii) the subject matter of the document; (iii) the privilege claimed for the document and all facts supporting the claim of privilege; (iv) the primary purpose(s), including any business purposes, for which the document was made; (v) the question(s) in this information request that the document is responsive to; and (vi) all facts contained in the document that are responsive to a question in this information request.

EPA requires AEPCO to postmark its full response to this information request by the dates set forth in the cover letter accompanying this letter. Please submit your response to this information request to:

Deborah Jordan  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, California 94105  
ATTN: Joseph Lapka (Air-5)

The response to this information request must be certified by a duly authorized officer or agent of AEPCO by signing the enclosed Statement of Certification (see Enclosure 2) and returning it with the response. All information submitted in response to this information request must be certified as true, correct, accurate, and complete by an individual with sufficient knowledge and authority to make such representations on behalf of AEPCO.

If you anticipate not being able to respond fully to this information request within the time period specified, you must submit a statement by a responsible corporate official within twenty (20) calendar days after your receipt of this letter specifying what information will be provided within the time specified, describing what efforts have been/are being made to obtain other responsive information and providing a detailed schedule outlining when such other responsive information can be provided. Upon receipt and based upon such declaration, EPA may extend the time in which responsive information must be provided. Based upon such notification, EPA may modify the scope of documents required to be produced.

Please be advised that under Section 113(a) of the Act, failure to provide the information



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required by this letter may result in an Order requiring compliance, an Order assessing an administrative penalty, or a civil action for appropriate relief. In addition, Section 113(c) of the Act provides criminal penalties for knowingly making any false statements or omission in any response required under the Act. EPA may also seek criminal penalties from any person who knowingly alters, destroys, mutilates, conceals, covers up, falsifies, or makes a false entry in any record, document, or tangible object with the intent to impede, obstruct, or influence the investigation or proper administration of any matter within the jurisdiction of EPA or in relation to or contemplation of any such matter or case. See 18 U.S.C. § 1519 (2004). The information provided by you may be used by the United States in administrative, civil, or criminal proceedings.

You may, if you desire, assert a business confidentiality claim on behalf of AEPCO covering part or all of the information provided to EPA in response to this letter. Any such claim to confidentiality must conform to the requirements set forth in 40 C.F.R. part 2, especially 40 C.F.R. § 2.203. You are advised that certain information may be made available to the public pursuant to 42 U.S.C. § 7414(c) and 40 C.F.R. § 2.301, notwithstanding a claim that such information is entitled to confidential treatment. If no claim of confidentiality is received with your reply, the information may be made available to the public without notice to AEPCO.

The requirements of this letter are not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. § 3501 *et seq.*

If you have any questions regarding this information request, please contact Joseph Lapka (415-947-4226) of my staff, or have your attorney contact Allan Zabel (415-972-3902) of our Office of Regional Counsel.

Sincerely,



Deborah Jordan  
Director, Air Division

Enclosures: Instructions and Definitions  
Statement of Certification

cc: Eric Massey, ADEQ

## **ENCLOSURE 1**

### **INSTRUCTIONS**

1. Provide a separate narrative response to each numbered paragraph and subpart of a numbered paragraph set forth in this information request. To the extent that AEPCO has no responsive information or documents for any particular request, this must be explicitly stated in the response.
2. Precede each answer with the number of the paragraph to which it corresponds and at the end of each answer identify the person(s) that provided information that was used or considered in responding to that paragraph, as well as each person that was consulted in the preparation of that response.
3. Indicate on each document produced in response to this information request, or in some other reasonable manner, the number of the paragraph to which it corresponds. To the extent that a document is responsive to more than one request, this must be so indicated and only one copy of the document need be provided. All documents produced shall be Bates stamped.
4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
5. Where documents or information necessary for a response are neither in your possession nor available to you, indicate in your response why such documents or information is not available or in your possession and identify any source that either possesses or is likely to possess such information.
6. AEPCO shall make an electronic copy of each hard-copy document produced by AEPCO in response to this information request. These electronic copies shall be in PDF format, searchable using the optical character recognition function, and submitted on compact disks (CDs) or digital versatile disks (DVDs).

### **DEFINITIONS**

All terms used in this information request will have their ordinary meaning unless such terms are defined in the Act, 42 U.S.C. § 7401, C.F.R. Part 52, or other Clean Air Act implementing regulations.

1. The terms "document" and "documents" shall mean any object that records, stores, or presents information, and includes writings, memoranda, records, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer

format, memory, or storage device, or in hardcopy, including any form or format of these. If in computer format or memory, each such document shall be provided in translation to a form useable and readable by EPA, with all necessary documentation and support. All documents in hard copy should also include attachments to or enclosures with any document.

2. The term "capital appropriation requests" shall mean the documents used by station personnel that serve the purpose of describing capital projects for equipment and process changes when seeking management approval for a planned expenditure at the station. These documents are also known as capital improvement requests, authorizations for expenditure, work order records, or other similar names.

3. The term "electric generating unit" or "EGU" shall mean the units designated by AEPCO as Steam Unit 1, Steam Unit 2, Steam Unit 3, Gas Turbine 1, and Gas turbine 3, and all equipment associated with these units used for the purpose of generating electricity including but not limited to coal handling facilities, boilers, ductwork, stacks, turbines, generators, and all ancillary equipment.

4. The term "hr" shall mean one hour.

5. The term "lb" shall mean one pound in weight.

6. The term "Mw" shall mean a megawatt of electrical energy.

7. The term "Mw-hr" shall mean megawatt hours of electrical energy.

8. The term "Kw-hr" shall mean kilowatt hours of electrical energy.

9. The term "Btu" shall mean the British Thermal Unit of heat.

10. The term "MMBtu" shall mean one million British Thermal Units of heat.

11. The terms "you" or "AEPCO" shall mean the addressee of this information request, the addressee's officers, partners, managers, employees, contractors, trustees, successors, predecessors, assigns, and agents.

12. The term "information request" shall mean this letter and all enclosures.

13. The term "capacity factor" shall mean the percentage of total gross megawatt hours produced by the coal-fired boiler compared to the total amount of megawatts hours that could have been produced at 100% equivalent availability factor for a given time period. Specify the maximum gross megawatt value used in calculating capacity factor.

14. The term "equivalent availability factor" shall mean the percentage of gross megawatt hours the coal-fired boiler was actually mechanically available to generate electricity in any amount compared to the maximum amount of megawatt hours the unit would theoretically be able to produce for a given time period without any mechanical restrictions (forced outage or deratings) to the existing coal-fired boiler. Specify the maximum gross megawatt value used in calculating equivalent availability factor.
15. The term "net dependable capacity" shall mean the maximum capacity a coal-fired boiler can sustain over a specified period of time, adjusted for seasonal limitations and less the coal-fired boiler capacity utilized for that coal-fired boiler's station service and/or auxiliaries.
16. The term "commencement of operation" means the initial combustion of any fuel in a boiler for any reason.

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**ENCLOSURE 2**

**STATEMENT OF CERTIFICATION**

I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, correct, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information, or omitting required statements and information, including the possibility of fine or imprisonment.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Name (printed or typed): \_\_\_\_\_

Title: \_\_\_\_\_